

said method comprising reacting a biological material with said optical isomer I, wherein said biological material converts said optical isomer I to said optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said conversion being not inhibited seriously by an amino acid transferase inhibitor  $\beta$ -chloro-D-alanine,  $\beta$ -chloro-L-alanine or gabaculine,

wherein said biological material is one obtained from a microorganism belonging to the genus *Arthrobacter*, *Klebsiella*, *Nocardia*, *Rhizobium*, *Saccharopolyspora* or *Streptomyces*, and isolating an optical isomer II.

11. (twice amended) A method for producing an optical isomer II from an optical isomer I of an amino acid represented by Formula (1):



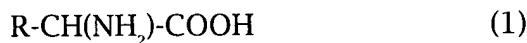
wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group,

said method comprising reacting a biological material with said optical isomer I, wherein said biological material converts said optical isomer I to said optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said conversion being not inhibited seriously by an amino acid transferase inhibitor  $\beta$ -chloro-D-alanine,  $\beta$ -chloro-L-alanine or gabaculine,

wherein said biological material is one obtained from a microorganism classified to *Arthrobacter pascens*, *Flavimonas oryzihabitans*, *Klebsiella planticola*,

*Nocardia diaphanozonaria*, *Pseudomonas chlororaphis*, *Pseudomonas oleovorans*, *Pseudomonas oxalaticus*, *Pseudomonas taetrolens*, *Rhizobium meliloti*, *Saccharopolyspora hirsuta* or *Streptomyces roseus*, and isolating said optical isomer II.

12. (twice amended) A method for producing an optical isomer II from an optical isomer I of an amino acid represented by Formula (1):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, said method comprising reacting a biological material with said optical isomer I, wherein said biological material converts said optical isomer I to said optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said conversion being not inhibited seriously by an amino acid transferase inhibitor  $\beta$ -chloro-D-alanine,  $\beta$ -chloro-L-alanine or gabaculine,

wherein said biological material is one obtained from *Arthrobacter pascens* strain IFO12139, *Flavimonas oryzihabitans* strain JCM2952, *Klebsiella planticola* strain JCM7251, *Nocardia diaphanozonaria* strain JCM3208, *Pseudomonas chlororaphis* strain IFO3521, *Pseudomonas oleovorans* strain IFO13583, *Pseudomonas oxalaticus* strain IFO13593, *Pseudomonas taetrolens* strain IFO3460, *Rhizobium meliloti* strain IFO14782, *Saccharopolyspora hirsuta* subsp. *kobensis* strain JCM9109 or *Streptomyces roseus* strain IFO12818, and isolating said optical isomer II.

13. (twice amended) A method for improving the optical purity of an amino acid represented by Formula (1):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, said method comprising reacting a biological material with said amino acid represented by Formula (1), wherein said biological activity converts an optical isomer I of said amino acid to an optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said conversion being not inhibited seriously by an amino acid transferase inhibitor  $\beta$ -chloro-D-alanine,  $\beta$ -chloro-L-alanine or gabaculine,

wherein said biological material is one obtained from a microorganism belonging to the genus *Arthrobacter*, *Klebsiella*, *Nocardia*, *Rhizobium*, *Saccharopolyspora* or *Streptomyces*,

whereby the optical purity of the optically active amino acid is higher than the optical purity of the optically active amino acid prior to said reaction with a biological material.

14. (twice amended) A method for improving the optical purity of an amino acid represented by Formula (1):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group,

said method comprising reacting a biological material with said amino acid represented by Formula (1), wherein said biological material converts an optical isomer I of said amino acid to an optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said conversion being not inhibited seriously by an amino acid transferase inhibitor  $\beta$ -chloro-D-alanine,  $\beta$ -chloro-L-alanine or gabaculine,

wherein said biological material is one obtained from a microorganism classified to *Arthrobacter pascens*, *Flavimonas oryzihabitans*, *Klebsiella planticola*, *Nocardia diaphanozonaria*, *Pseudomonas chlororaphis*, *Pseudomonas oleovorans*, *Pseudomonas oxalaticus*, *Pseudomonas taetrolens*, *Rhizobium meliloti*, *Saccharopolyspora hirsuta* or *Streptomyces roseus*,

whereby the optical purity of the optically active amino acid is higher than the optical purity of the optically active amino acid prior to said reaction with a biological material.

15. (twice amended) A method for improving the optical purity of an amino acid represented by Formula (1):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group,

said method comprising reacting a biological material with said amino acid represented by Formula (1), wherein said biological material converts an optical isomer I of said amino acid to an optical isomer II, the isomerism being on the basis of an

asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said conversion being not inhibited seriously by an amino acid transferase inhibitor  $\beta$ -chloro-D-alanine,  $\beta$ -chloro-L-alanine or gabaculine,

wherein said biological material is one obtained from *Arthrobacter pascens* strain IFO12139, *Flavimonas oryzihabitans* strain JCM2952, *Klebsiella planticola* strain JCM7251, *Nocardia diaphanozonaria* strain JCM3208, *Pseudomonas chlororaphis* strain IFO3521, *Pseudomonas oleovorans* strain IFO13583, *Pseudomonas oxalaticus* strain IFO13593, *Pseudomonas taetrolens* strain IFO3460, *Rhizobium meliloti* strain IFO14782, *Saccharopolyspora hirsuta* subsp. *kobensis* strain JCM9109 or *Streptomyces roseus* strain IFO12818,

whereby the optical purity of the optically active amino acid is higher than the optical purity of the optically active amino acid prior to said reaction with a biological material.

*Sub E1* 16. (twice amended) A method for producing an optical isomer II from an optical isomer I of an amino acid represented by Formula (1):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, said method comprising reacting a biological material with a racemic mixture of said optical isomers I and II, wherein said biological material converts an optical isomer I of said amino acid to an optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are

bound and said conversion being not inhibited seriously by an amino acid transferase inhibitor  $\beta$ -chloro-D-alanine,  $\beta$ -chloro-L-alanine or gabaculine, and isolating said optical isomer II.

17. (twice amended) A method for producing an optically active isomer II from an optical isomer I of an amino acid represented by Formula (1):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, said method comprising reacting a biological material with said optical isomer I, wherein said biological material converts said optical isomer I of said amino acid to said optically active isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said conversion being not inhibited seriously by an amino acid transferase inhibitor  $\beta$ -chloro-D-alanine,  $\beta$ -chloro-L-alanine or gabaculine, and isolating said optically active isomer II.

18. (twice amended) A method for increasing the optical purity of an optically active amino acid composition with respect to an optical isomer II of an amino acid represented by Formula (1):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group,

*D*  
said method comprising reacting a biological material with an optically active amino acid composition comprising a mixture of an optical isomer I and said optical isomer II, wherein said biological material converts said optical isomer I of said amino acid to said optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said conversion being not inhibited seriously by an amino acid transferase inhibitor  $\beta$ -chloro-D-alanine,  $\beta$ -chloro-L-alanine or gabaculine, and isolating said optical isomer II, whereby the optical purity of the optically active amino acid composition is higher than the optical purity of the optically active amino acid composition prior to said reaction with a biological material.